

### Abstract of the Disclosure

An automatic power factor correction system, for an electrical power installation drawing varying levels of reactive power, measures an electrical parameter of the power drawn by a load of a power installation using a power measurement integrated circuit, the parameter being capable of indicating a level of reactive power drawn by the load, and couples a combination of capacitors to the power line to compensate for the level of reactive power indicated by the electrical parameter measured. In a first embodiment of the invention, the combination of power factor compensating capacitors is calculated from a signed value of reactive power drawn by the load. In a second embodiment, the compensating capacitor combination is calculated from a value of power factor for the load which is calculated from a ratio of an active power value to an apparent power value.